PATENT
Docket No. YR0-28

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT:	Robert A. Wiedeman et al
SERIAL NUMBER:	09/846,995
FILING DATE:	May 1, 2001
FOR:	Low Performance Warning System and Method For Mobile Satellite Service User Terminals
GROUP ART UNIT:	2684
EXAMINER:	Nick Corsaro

CERTIFICATE OF MAILING UNDER 37 CFR 1.8

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Identification of Transmitted Papers

Appeal Brief in triplicate, Appeal Brief Transmittal Letter in triplicate, Credit Card Payment Form PTO-2038, return receipt postcard

I hereby certify that the above-identified correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop Appeal Brief-Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on **June 9, 2005**.

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PATENT
YR0-28

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

In re Application of: Robert A. Wiedeman et al	: Date: June 9, 2005
Serial No. 09/846,995	: Group Art Unit: 2684
Filed: May 1, 2001	: Examiner: Nick Corsaro
For: Low Performance Warning System and Method for Mobile Satellite Service User Terminals	:

APPEAL BRIEF TRANSMITTAL LETTER

Mail Stop Appeal Brief-Patents
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P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Enclosed is an Appeal Brief, in triplicate, for the above patent application.

___ Applicant petitions for an extension of time for month(s). If an additional extension of time is required, please consider this a petition therefor. Fee:

___ An extension for month(s) has already been secured; the fee paid therefore is deducted from the total fee due for the total months of extension now requested. Extension fee due with this request:

_X_ Applicant believes that no extension of time is required. However, this conditional petition is being made to provide for the possibility that applicant has inadvertently overlooked the need for a petition for extension of time.

___ The Appeal Brief Fee was paid in a prior appeal in which there was no decision on the merits by the Board of Appeals.

___ The Appeal Brief Fee is enclosed herewith. Fee: $500.00

_X_ Charge the Appeal Brief Fee to my Credit Card. Credit Card Payment Form PTO-2038 is enclosed herewith.

_X_ The total fee due is $500.00

_X_ Address all correspondence to Joyce Kosinski, Karambelas & Associates, 655 Deep Valley Drive, Suite 303, Rolling Hills Estates, CA 90274.

This letter is submitted in triplicate.

06/14/2005 MAHMED1 00000065 09846995

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Respectfully submitted,

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PATENT
YR0-28

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS

Appeal No._____

In re Application of: ROBERT A. WIEDEMAN ET AL

Serial No.: 09/846,995

Filed: May 1, 2001

For: LOW PERFORMANCE WARNING SYSTEM AND METHOD FOR MOBILE SATELLITE SERVICE USER TERMINALS

APPELLANTS' BRIEF ON APPEAL

Anthony W. Karambelas
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF APPEALS

In re Application of: ROBERT A. WIEDEMAN ET AL	: Date: June 9, 2005
Serial No.: 09/846,995	: Group Art Unit: 2684
Filed: May 1, 2001	: Examiner: Nick Corsaro
For: LOW PERFORMANCE WARNING SYSTEM AND METHOD FOR MOBILE SATELLITE SERVICE USER TERMINALS	:

APPELLANTS' BRIEF ON APPEAL

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This appeal is taken from the decision of the Examiner in the Office Action dated January 18, 2005 finally rejecting Claims 1-6, 8-15, 17-24 and 26-31 of the above-identified patent application. This brief is submitted in accordance with the provisions of 37 C.F.R. §41.37.

REAL PARTY IN INTEREST

The real party in interest is Globalstar L.P. which acquired rights to the present application by way of an assignment from the inventors.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences known to Appellants, Appellants' legal representative, or the assignee which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Claims 1-6, 8-15, 17-24 and 26-34 are currently pending in this application. Claims 1-6, 8-15, 17-24 and 26-31 were finally rejected in the Office Action dated January 18, 2005. Claims 32-34 are allowed. Appellants appeal from this final rejection.

STATUS OF AMENDMENTS

A communication responsive to the final rejection dated January 18, 2005 was filed with no amendments made therein.

SUMMARY OF CLAIMED SUBJECT MATTER

A method is disclosed for operating a mobile satellite telecommunications (MSTS) system, as is a system that operates in accordance with the method. In a MSTS having at least one user terminal, at least one satellite in earth orbit, and at least one gateway bidirectionally coupled to a data communications network, in response to a determination that at least one criterion being met, an indicator of the user terminal is activated for informing a user of a potential for reduced user terminal performance. The at least one criterion can include the number of satellites through which a communication between the user terminal and the gateway is conducted, such as an occurrence of there being only one satellite through which the communication between the user terminal and the gateway is conducted, or a prediction of an occurrence that there will be only one satellite through which the communication between the user terminal and the gateway will be conducted. The criteria can further include an occurrence of an elevation angle between the one satellite and the user terminal falling below a minimum threshold value and/or an occurrence of a signal strength or signal quality of a link between the one satellite and the user terminal falling below a minimum threshold value. The user terminal is preferably responsive to received pilot channel signals for detecting a number of satellites through which a communication between the user terminal and the gateway is conducted. The indicator is preferably at least one of a visual indicator, a tactile indicator or an audible indicator. In one embodiment the determination that the at least one criterion has been met is made in the user terminal, while in another embodiment the determination is made in the gateway, preferably based at least in part on information transmitted to the gateway from the user terminal.

The subject matter defined in each of the independent claims involved in the appeal can be found in the specification on page 7, line 26 through page 9, line 10, and in at least Figure 1 wherein there is shown user terminal 10, satellite 40, gateway 50, controller 18 and indicator 38.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1, 10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maveddat et al U. S. Patent 6,070,073 in view of Rydbeck et al U. S. Patent 5,930,718.
2. Claims 2-6, 8-9, 11-15, 17-18, 20-24 and 26-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Maveddat et al 6,070,073 in view of Rydbeck et al 5,930,718 as applied to claims 1, 10 and 19 above, and further in view of Arrington et al U. S. Patent No. 5,918,176 and Redden et al U. S. Patent No. 5,490,087.

ARGUMENT

Rejection under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent 6,070,073 to Maveddat et al in view of U. S. Patent 5,930,718 to Rydbeck et al.

The Examiner has rejected claims 1, 10 and 19 under 35 U.S.C. 103(a) as being unpatentable over Maveddat et al 6,070,073 in view of Rydbeck et al 5,930,718.

The Examiner states that considering claim 1, Maveddat discloses a mobile satellite telecommunications system, directing Appellants' attention to col. 1, lines 7-35 and col. 5, lines 7-12. Further, the Examiner states that Maveddat discloses at least one user terminal; at least one satellite in earth orbit; and at least one gateway bidirectionally coupled to a data communications network, directing Appellants' attention to col. 5, lines 7-47. The Examiner further submits that Maveddat discloses said user terminal comprising a controller responsive to at least one criterion having been met for activating a message for informing a user of a potential for reduced user terminal performance, directing Appellants' attention to col. 8, lines 21-65.

However, the Examiner admits that Maveddat does not specifically disclose activating an indicator. However, the Examiner submits that Rydbeck teaches activating an indicator, directing Appellants' attention to col. 7, lines 35-67 and col. 8, lines 15-40.

The Examiner therefore concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Maveddat, and have activate an indicator, as taught by Rydbeck, thus allowing the user to be notified of low link margin as discussed by Rydbeck, directing Appellants' attention to col. 1, lines 18-44 and col. 1, lines 60-67.

Appellants respectfully submit that in Maveddat '073 at col. 1, lines 7-35 there is a broad ranging discussion relating to most cellular phone systems including an illustration of a typical satellite environment where the satellite may be orbiting at either a geo-stationary, a low earth orbit or a medium earth orbit. At col. 5, lines 7-47 there is disclosed a simplified version of the communication system of Fig. 1, including a satellite, a gateway which are used for communication with mobile subscriber terminals. It is therein stated "Thus, in mobile communication network 300, satellite 302 switches an incoming data stream to a pre-assigned downlink beam....

"To compensate for such communication disruptions, the present invention re-routes the call from a disrupted gateway to another gateway which is not disrupted."

Further, at col. 8, lines 21-26 it is stated "A first step of the methodology implemented in one embodiment of the present invention notifies subscribers that an outage will occur in the near future. Again, as previously described, such outages are

"typically predictable. For example, in a GEO satellite system, a sun transit interruption occurs regularly once a week from two to four minutes....

"In one embodiment of the present invention, an intelligent peripheral, such as intelligent peripheral 116 of communication network 100, determines when the event will occur using an automatic forecasting algorithm....Intelligent peripheral 116 then informs network control center 112 that an outage event will occur at a point in time....By utilizing satellite 102 to connect the control information between MSC A 110 and MSC B 104, this roaming operation is effectively performed in an efficient manner that allows users to maintain their communications without interruptions."

Appellants respectfully disagree that this teaching, especially that to be found in col. 8, lines 21-65, suggests, teaches or implies a user terminal comprising a controller responsive to at least one criterion having been met for activating an indicator for informing a user of potential for reduced user terminal performance. In the alternative, what is described in the recitation relied upon by the Examiner, as seen in col. 8, lines 27 et seq. "Again, as previously described, such outages are typically predictable. For example, in a GEO satellite system, a sun transit interruption occurs regularly once a week from two to four minutes. Additionally, scheduled maintenance or the various components of the communication network is also easily predictable. Given the predictability of certain outages and disruptions in communication services, the present invention implements a method for notifying a subscriber about an impending outage event and the corresponding description of service."

Appellants respectfully submit that this is to be contrasted with informing a user by activating an indicator of a potential for reduced user terminal performance, not outages that are predictable as set out in Maveddat '073.

In Rydbeck '718 at col. 7, lines 35-67 there is described "Provided synchronization to alternative paging channel 22 is maintained, mobile satellite phone 16 next determines whether any messages are received from alternative paging channel 22 (see decision block 61)....

"It should be understood that the alert signal given the user of mobile satellite phone 16 by any or all of the above-enumerated ways indicates that mobile satellite phone 16 and/or antenna 32 thereof are in a disadvantageous position (i.e., one in which synchronization with normal paging channel 20 cannot be obtained). This will signify to the user that some remedial action on his part is required to obtain synchronization to such normal paging channel 20, such as reorienting antenna 32 into a favorable position or moving mobile satellite phone 16 adjacent the window of a building."

Further, at col. 8, lines 15-65 of Rydbeck it is stated "According to mobile satellite phone 16 and the process implemented thereby, a user thereof is alerted when messages are received on a paging channel other than normal paging channel 20....

"Also, alternative paging channels having a higher margin level than normal paging channel 20, but less than the specified margin level, may initiate transmission of acknowledgment signal 26."

Further, at col. 1, lines 18-44 there is merely a broad ranging discussion of the invention relating to a communication system and the manner in which a mobile radio telephone is signaled by the system that a message is pending for reception. At col. 1, lines 60-67 Appellants respectfully submit it is stated "In light of the foregoing, a primary objective of the present invention is to provide a mobile radio telephone which generates a signal to alert the user thereof when a message is received other than through a normal paging channel."

Appellants respectfully disagree that at the recited passages in Rydbeck relied upon by the Examiner said user terminal as outlined in element 4 of claim 1, for example, comprising a controller responsive to at least one criterion having been met for activating an indicator for informing a user of a potential for reduced user terminal performance is taught, suggested or implied. The thrust of Rydbeck '718 as may be seen in col. 1, lines 60 et seq. and elsewhere is to generate a signal to alert the user when a message is received other than through a normal paging channel. This is to be contrasted with equipping the user terminal with a controller responsive to at least one criterion having been met for activating an indicator for informing a user of a potential for reduced user terminal performance as recited in element 4 of claim 1, for example.

Appellants therefore respectfully disagree that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Maveddat and have activate an indicator as taught by Rydbeck thus allowing the user to be notified of low link margin as discussed by Rydbeck at col. 1, lines 18-44 and col. 1, lines 60-67 and elsewhere in said reference.

Furthermore, Appellants take the position that Maveddat '073, directed to a communication system and method for notification and call routing in a mobile satellite network, is nonanalogous to Rydbeck '718, directed to apparatus and method for transmitting and receiving a signaling message in a communication system, and furthermore that there is no suggestion, implication or teaching in either of the references that they may be so combined in order to reject the instant claims.

The Examiner goes on to say considering claim 10, Maveddat discloses a mobile satellite telecommunications system, directing Appellants' attention to col. 1, lines 7-35 and col. 5, lines 7-12. The Examiner further submits that Maveddat discloses at least one user

terminal; at least one satellite in earth orbit; and at least one gateway bi-directionally coupled to a data communications network, directing Appellants' attention to col. 5, lines 7-47. The Examiner further states that Maveddat discloses said user terminal comprising a controller responsive to a receipt of a message from said gateway, indicating that at least one criterion has been met, for activating a message for informing a user of a potential for reduced user terminal performance, directing Appellants' attention to col. 8, lines 21-65.

The Examiner admits that Maveddat does not specifically disclose activating an indicator but that Rydbeck teaches activating an indicator at col. 7, lines 35-67 and col. 8, lines 15-40.

The Examiner therefore concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Maveddat and have activate an indicator as taught by Rydbeck, thus allowing the user to be notified of low link margin, as discussed by Rydbeck at col. 1, lines 18-44 and col. 1, lines 60-67.

Appellants respectfully submit that the recitations at col. 1, lines 7-35 and col. 5, lines 7-12, in addition to those at col. 5, lines 7-47 and col. 8, lines 21-65, relied upon by the Examiner, have been discussed above, which remarks and discussion are hereby respectfully incorporated by reference.

The recitations relied upon by the Examiner with regard to the Rydbeck reference at col. 7, lines 35-67 and col. 8, lines 15-40 have been fully discussed above with regard to other claims, which discussion is hereby respectfully incorporated by reference. Further, the Rydbeck reference at col. 1, lines 18-44 and col. 1, lines 60-67, relied upon by the Examiner, relating to activating an indicator thus allowing the user to be notified of low link margin, have been distinguished above in remarks presented with regard to other claims, which remarks are hereby respectfully incorporated by reference.

Appellants respectfully submit that Rydbeck, directed to providing a mobile radio telephone which generates a signal to alert the user thereof when a message is received other than through a normal paging channel does little to cure the deficiencies of Maveddat which is directed to predicting outages which are stated to be typically predictable at col. 8, lines 25 et seq. in a communication system and method for notification and call routing in a mobile satellite network. Further, Appellants again restate the impropriety of combining these references for the reasons stated above in order to reject the instant claims.

The Examiner states considering claim 19, Maveddat discloses a method for operating a mobile satellite telecommunications system, directing Appellants' attention to col. 1, lines 7-35 and col. 5, lines 7-12. The Examiner submits that Maveddat discloses providing at least one user terminal, at least one satellite in earth orbit, and at least one gateway bi-directionally coupled to a data communications network, directing Appellants'

attention to col. 5, lines 7-47. Further, the Examiner states that Maveddat discloses determining that at least one criterion has been met; and activating a message on said user terminal for informing a user of a potential for reduced user terminal communication, directing Appellants' attention to col. 8, lines 21-65.

However, the Examiner states that Maveddat does not specifically disclose activating an indicator but that Rydbeck teaches activating an indicator, directing Appellants' attention to col. 7, lines 35-67 and col. 8, lines 15-40.

Therefore, the Examiner concludes it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Maveddat, and have activate an indicator, as taught by Rydbeck, thus allowing the user to be notified of low link margin as discussed by Rydbeck at col. 1, lines 18-44 and col. 1, lines 60-67.

Appellants respectfully submit that they have fully considered and distinguished over those recitations relied upon by the Examiner at col. 1, lines 7-35, col. 5, lines 7-12, col. 5, lines 7-47, col. 8, lines 21-65 of Maveddat, which distinctions and discussion are hereby respectfully incorporated by reference. Furthermore, Appellants respectfully submit that the recitations relied upon by the Examiner in Rydbeck at col. 7, lines 35-67 and col. 8, lines 15-40, in addition to those found at col. 1, lines 18-44 and col. 1, lines 60-67, have been fully discussed and distinguished thereover in recitations above with regard to other claims, which recitations and distinctions are hereby respectfully incorporated by reference.

Appellants therefore respectfully disagree that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Maveddat, and have activate an indicator, as taught by Rydbeck, thus allowing the user to be notified of low link margin, as discussed by Rydbeck at col. 1, lines 18-44 and col. 1, lines 60-67 and elsewhere in said references for the reasons recited above with regard to claim 10 and claim 1, which distinctions are hereby respectfully incorporated by reference.

Rejection under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent 6,070,073 to Maveddat et al in view of U. S. Patent 5,930,718 to Rydbeck et al as applied to claims 1, 10 and 19, and further in view of U. S. Patent 5,918,176 to Arrington et al and U. S. Patent 5,490,087 to Redden et al.

The Examiner as rejected claims 2-6, 8-9, 11-15, 17-18, 20-24, 26-31 under 35 U.S.C. 103(a) as being unpatentable over Maveddat in view of Rydbeck as applied to claims 1, 10 and 19 above, and further in view of Arrington et al (5,918,176) and Redden et al (5,490,087).

The Examiner states considering claims 2-6, 8-9, 11-15, 17-18, 20-24, 26-31, Maveddat discloses the system and method, as modified by Rydbeck above, wherein a possible outage message and indicator given to the user terminal where the terminal is

covered by several satellites and the link margin of the satellites falls low. The Examiner further submits that Maveddat and Rydbeck do not specifically disclose a several coverage satellite system, where diversity transmission from the satellites such that the link margin is based on the diversity transmission. Further, the Examiner contends that Arrington shows coverage by several satellites and a report of link margin, directing Appellants' attention to col. 5, lines 30-67, col. 6, lines 55-67, and col. 8, lines 1-15. The Examiner further submits that Redden discloses diversity transmission and an outage report, directing Appellants' attention to col. 15, lines 7-47 and col. 9, lines 35-55.

The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Maveddat and Rydbeck, and have several coverage satellite system, where diversity transmission from the satellites such that the link margin is based on the diversity transmission, and link outage report, as taught by Arrington and Redden, thus allowing the reporting be done for mobiles in fading environments.

Appellants respectfully submit that in Arrington '176 at col. 5, lines 30-67 there is disclosed "a flowchart of a method for a CU to report one or more signal power measurements and to respond to system commands in accordance with a preferred embodiment of the present invention....Thus, to measure the power of the channel, the CU would identify, from the candidate cell list, the timeslot and frequency of the channel and would measure the power level of a signal received by the CU at the identified timeslot and/or frequency. In that manner, the CU could measure the power levels of each channel identified in the candidate cell list." Further, at col. 6, lines 55-67 there is stated that "In step 206, the CU sends the one or more power measurements, along with the CU location and time stamp, if any, to the communication system." At col. 8, lines 1-15 there is stated "For example, where the power measurements indicate that the CU is experiencing an unacceptable link margin, but the system is unable to mitigate the effects of the link margin, the system response could be a message to the CU that only degraded service can be provided to the CU at the current location."

Appellants respectfully submit that in Redden '087 at col. 15, lines 7-47 there is stated "Fig. 7 illustrates acquisition procedure 100 performed by subscriber unit 26 each time when access to system 10 is desired. When a user desires to initiate a communication, the user may initiate a request for service 102. This may be accomplished by either switching on the subscriber unit or dialing a desired phone number.....If other antenna beams are available and can be received by subscriber unit 26, task 118 selects another available antenna beam from satellite 12. Tasks 108 through 120 are repeated for each available antenna beam."

Appellants respectfully submit further, at col. 9, lines 35-55 of Redden relied upon by the Examiner, there is stated "The communication resource, (i.e. limited electromagnetic spectrum) can also be partitioned by the use of a hybrid combination of FDMA and TDMA known in the art as Code Division Multiplexing (CDM) or Code Division Multiple Access (CDMA).....Other techniques in the art for allocation of the communication resource include Space Diversity (SD) and Polarization Diversity (PD)....These communication techniques are also well known in the art."

Again, Appellants respectfully submit that Rydbeck does little to cure the deficiencies of Maveddat for reasons recited above which are hereby respectfully incorporated by reference and Arrington and Redden do not at all cure these significant deficiencies since Arrington inter alia is directed to a satellite-to-satellite handoff system as opposed to the diversity contemplated by the instant invention relating to handoff from a user terminal to another satellite as is the case with Redden. Appellants are at a loss to understand how the Maveddat and Rydbeck references, whose deficiencies have been recited above, can be combined with Arrington and Redden allegedly to demonstrate coverage by several satellites and a report of link margin in the case of Arrington, and demonstrating diversity transmission and an outage report in the case of Redden as set out by the Examiner. Appellants respectfully contend that, aside from the deficiencies indicated in Maveddat and Rydbeck, if they were to be applied to the instant claims, the system described and claimed is one of user terminal to satellite, user terminal to satellite in a handoff depending on satellite visibility, whereas in the case of Arrington and Redden it is user terminal to satellite to satellite to satellite to destination, clearly nonanalogous and not properly combinable to reject the instant claims.

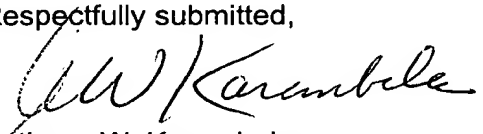
Therefore, Appellants respectfully disagree that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Maveddat and Rydbeck and have several coverage satellite system where diversity transmission from the satellites such that the link margin is based on the diversity transmission and link outage report as taught by Arrington and Redden, thus allowing the reporting be done for mobiles in fading environments.

Appellants respectfully submit that in view of the above remarks, all of the claims presently under prosecution have been shown to contain patentable subject matter and to be patentably distinguishable over the art of record. Further, Appellants respectfully submit that he has clearly shown that all of the claims are patentably distinguishable over any combination of Maveddat et al and Rydbeck et al; that such a combination is neither suggested nor implied in either reference so that motivation to combine is clearly lacking and further that any combination of Maveddat et al, Rydbeck et al, Arrington et al and Redden et al is neither suggested nor implied in any of the references so that motivation to

combine is clearly lacking for the reasons recited above to properly reject the recited claims under 35 U.S.C. 103.

Accordingly, Appellants respectfully request that the final rejection of the primary Examiner be reversed.

Respectfully submitted,



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CLAIMS APPENDIX

Claims 1-6, 8-15, 17-24 and 26-34 as presented below are currently pending in this application.

1. A mobile satellite telecommunications system, comprising:
at least one user terminal;
at least one satellite in earth orbit; and
at least one gateway bidirectionally coupled to a data communications network;
said user terminal comprising a controller responsive to at least one criterion having been met for activating an indicator for informing a user of a potential for reduced user terminal performance.

2. A mobile satellite telecommunications system as in claim 1, wherein said at least one criterion is comprised of a number of satellites through which a communication between the user terminal and the gateway is conducted.

3. A mobile satellite telecommunications system as in claim 1, wherein said at least one criterion is comprised of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted.

4. A mobile satellite telecommunications system as in claim 1, wherein said at least one criterion is comprised of a prediction of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted.

5. A mobile satellite telecommunications system as in claim 1, wherein said at least one criterion is comprised of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted, and a further occurrence of an elevation angle between said one satellite and said user terminal falling below a minimum threshold value.

6. A mobile satellite telecommunications system as in claim 1, wherein said at least one criterion is comprised of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted, and a further occurrence of a signal strength or a signal quality of a link between said one satellite and said user terminal falling below a minimum threshold value.

8. A mobile satellite telecommunications system as in claim 1, wherein said user terminal is responsive to received pilot channel signals for detecting a number of satellites through which a communication between the user terminal and the gateway is conducted.

9. A mobile satellite telecommunications system as in claim 1, wherein said indicator is comprised of at least one of a visual indicator, a tactile indicator and an audible indicator.

10. A mobile satellite telecommunications system comprising:
at least one user terminal;
at least one satellite in earth orbit; and
at least one gateway bidirectionally coupled to a data communications network;
said user terminal comprising a controller responsive to a receipt of a message from said gateway, indicating that at least one criterion has been met, for activating an indicator for informing a user of a potential for reduced user terminal performance.

11. A mobile satellite telecommunications system as in claim 10, wherein said at least one criterion is comprised of a number of satellites through which a communication between the user terminal and the gateway is conducted.

12. A mobile satellite telecommunications system as in claim 10, wherein said at least one criterion is comprised of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted.

13. A mobile satellite telecommunications system as in claim 10, wherein said at least one criterion is comprised of a prediction of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted.

14. A mobile satellite telecommunications system as in claim 10, wherein said at least one criterion is comprised of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted, and a further occurrence of an elevation angle between said one satellite and said user terminal falling below a minimum threshold value.

15. A mobile satellite telecommunications system as in claim 10, wherein said at least one criterion is comprised of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted, and a further

occurrence of a signal strength or a signal quality of a link between said one satellite and said user terminal falling below a minimum threshold value.

17. A mobile satellite telecommunications system as in claim 10, wherein said user terminal is responsive to received pilot channel signals for detecting a number of satellites through which a communication between the user terminal and the gateway is conducted, and for transmitting information indicative of the number of satellites to said gateway.

18. A mobile satellite telecommunications system as in claim 10, wherein said indicator is comprised of at least one of a visual indicator, a tactile indicator and an audible indicator.

19. A method for operating a mobile satellite telecommunications system, comprising:

providing at least one user terminal, at least one satellite in earth orbit, and at least one gateway bidirectionally coupled to a data communications network;

determining that at least one criterion has been met; and

activating an indicator of said user terminal for informing a user of a potential for reduced user terminal performance.

20. A method as in claim 19, wherein said at least one criterion is comprised of a number of satellites through which a communication between the user terminal and the gateway is conducted.

21. A method as in claim 19, wherein said at least one criterion is comprised of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted.

22. A method as in claim 19, wherein said at least one criterion is comprised of a prediction of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted.

23. A method as in claim 19, wherein said at least one criterion is comprised of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted, and a further occurrence of an elevation angle between said one satellite and said user terminal falling below a minimum threshold value.

24. A method as in claim 19, wherein said at least one criterion is comprised of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted, and a further occurrence of a signal strength or a signal quality of a link between said one satellite and said user terminal falling below a minimum threshold value.

26. A method as in claim 19, wherein said user terminal is responsive to received pilot channel signals for detecting a number of satellites through which a communication between the user terminal and the gateway is conducted.

27. A method as in claim 19, wherein said indicator is comprised of at least one of a visual indicator, a tactile indicator and an audible indicator.

28. A method as in claim 19, wherein said determination is made in said user terminal.

29. A method as in claim 19, wherein said determination is made in said gateway.

30. A method as in claim 19, wherein said determination is made in said gateway based at least in part on information transmitted to said gateway from said user terminal.

31. A method as in claim 19, wherein the indicator is activated to indicate a potential to drop a call.

32. A mobile satellite telecommunications system comprising:

at least one user terminal;

at least one satellite in earth orbit; and

at least one gateway bidirectionally coupled to a data communications network;

said user terminal comprising a controller responsive to at least one criterion having been met for activating an indicator for informing a user of a potential for reduced user terminal performance;

said at least one criterion being comprised of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted, a further occurrence of an elevation angle between said one satellite and said user terminal falling below a minimum threshold value and a further occurrence of a signal strength or a signal quality of a link between said one satellite and said user terminal falling below a minimum threshold of value.

33. A mobile satellite telecommunications system comprising:

at least one user terminal;

at least one satellite in earth orbit; and

at least one gateway bidirectionally coupled to a data communications network;

said user terminal comprising a controller responsive to a receipt of a message from said gateway, indicating that at least one criterion has been met, for activating an indicator for informing a user of a potential for reduced user terminal performance,

wherein said at least one criterion is comprised of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted, a further occurrence of an elevation angle between said one satellite and said user terminal falling below a minimum threshold value, and a further occurrence of a signal strength or a signal quality of a link between said one satellite and said user terminal falling below a minimum threshold value.

34. A method for operating a mobile satellite telecommunications system comprising:

providing at least one user terminal;

at least one satellite in earth orbit; and

at least one gateway bidirectionally coupled to a data communications network;

determining the at least one criterion has been met; and

activating an indicator of said user terminal for informing a user of a potential for reduced user terminal performance,

wherein said at least one criterion is comprised of an occurrence of there being only one satellite through which a communication between the user terminal and the gateway is conducted, a further occurrence of an elevation angle between said one satellite and said user terminal falling below a minimum threshold value, and a further occurrence of a signal strength or a signal quality of a link between said one satellite and said user terminal falling below a minimum threshold value.

EVIDENCE APPENDIX

RELATED PROCEEDINGS APPENDIX